Project Introduction

The proposed research is aimed at investigating a procedure verification and validation toolset, which will allow the engineers who are responsible for developing the on-board procedures to validate early, continuously, collaboratively and in real-time. Currently these engineers are limited to the use of big simulators such as the Space Station Training Facility (SSTF) for the ISS, which is costly to run and requires a scheduling of the facility a long time in advance. The targeted tool would fill the gap between the very limited validation done at their desktop (mainly peer review of the procedure) and the simulator run (where the procedures are tested in the very expensive training environment). This project has a number of innovative aspects, which will make the work of procedure developers easier and more consistent. Benefits realized from using a desktop based procedure validation toolset include the increase in safety, reduction of training costs, and improvement in procedure delivery time through early detection and resolution of errors.

Primary U.S. Work Locations and Key Partners

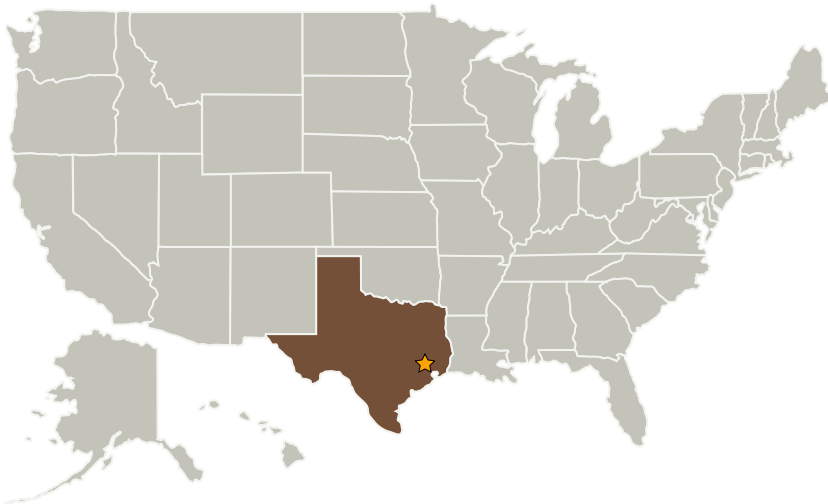

Procedure Verification and Validation Toolset, Phase II

Table of Contents

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Johnson Space Center (JSC)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Organizations Performing Work	Role	Type	Location
⭐Johnson Space Center(JSC)	Lead Organization	NASA Center	Houston, Texas
Tietronix Software, Inc.	Supporting Organization	Industry Small Disadvantaged Business (SDB)	Houston, Texas

Primary U.S. Work Locations
Texas

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Technology Areas

Primary:

- TX06 Human Health, Life Support, and Habitation Systems
  └ TX06.6 Human Systems Integration
    └ TX06.6.1 Human Factors Engineering